

Section 5 - 510(k) Summary

K071989  
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1. **Applicant Contact:**

Kevin Bentley  
Director of QA & RA  
Angiotech  
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Henrietta, NY 14467 USA  
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AUG - 6 2007

**Date Prepared:** July 19, 2007

2. **Name of Device:** Quill™ Self-Retaining System (SRS) comprised of PDO  
**Common Name:** Surgical suture, absorbable, Polydioxanone synthetic  
**Classification Name:** Absorbable Polydioxanone surgical suture  
Regulation 21 CFR 878.4840, Product Code NEW

3. **Identification of device(s) to which the submitted claims equivalence:**

The Quill™ Self-Retaining System (SRS) comprised of PDO is substantially equivalent to the following predicate device:

- Quill™ Synthetic Absorbable Polydioxanone Barbed Suture by Quill Medical, Inc., 510(k) K051609
- PDS II Synthetic Absorbable Surgical Suture by Ethicon, Inc. Docket no. 99P-5589.

4. **Device Description:**

The Quill™ Self-Retaining System (SRS) comprised of PDO is a synthetic absorbable suture available in various suture lengths and needle configurations in USP Sizes 3-0 and 4-0. Each suture has bi-directional barbs along the long axis of the suture strand. Barbs allow for tissue approximation without the need to tie surgical knots.

Quill™ SRS is comprised of dyed (D&C Violet No. 2 per 21 CFR 74.3602) polyester [poly (p-dioxanone)], the empirical molecular formula of which is  $(C_4H_6O_3)_x$ . Polydioxanone polymer has been found to be nonantigenic, nonpyrogenic and elicits only a slight tissue reaction during absorption.

As with interrupted sutures, if the Quill™ Self-Retaining System (SRS) comprised of PDO breaks, the remaining suture passes will hold the wound edges in approximation.

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### 5. **Intended Use of the Device:**

Quill™ Self-Retaining System (SRS) comprised of PDO is indicated for soft tissue approximation where use of an absorbable suture is appropriate.

### 6. **Characteristics of the device in comparison to those of the predicate devices**

#### **Indication for Use and Technology Comparison:**

The Quill™ Self-Retaining System (SRS) comprised of PDO is equivalent to the Quill® Synthetic Absorbable Polydioxanone Barbed Suture in its intended use of soft tissue approximation where use of an absorbable suture is appropriate and the technology of using barbs instead of knots to hold the tissue in approximation. The Quill™ Self-Retaining System (SRS) comprised of PDO and the Ethicon PDS II were used in animal studies to assess the capabilities of the barbs to maintain wound approximation as compared to knots.

#### **Material Comparison:**

The Quill™ Self-Retaining System (SRS) comprised of PDO is materially equivalent to the predicate devices, Quill® Synthetic Absorbable PDO Barbed Suture and PDS II Synthetic Absorbable Surgical Suture. The Quill™ Synthetic Absorbable PDO Barbed Suture and the predicate devices contain similar materials (monofilament fiber, needles & packaging materials), with same or similar EtO sterilization methods.

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The comparison of the predicate devices to the new device is summarized below:

	Quill™ SRS comprised of PDO	Quill® Synthetic Absorbable Polydioxanone Barbed Suture, K051609	PDS II Synthetic Absorbable Surgical Suture, Ethicon, Inc. Docket 99P-5589
Product Code	NEW	NEW	NEW
Suture Characteristic	Synthetic Absorbable PDO	Identical	Identical
Indication for Use	Soft tissue approximation	Identical	Identical
Technique of Deployment	Attached needles	Identical	Identical
Technological Characteristic	Bi-directional barbs along the long axis of the suture monofilament	Identical	Different
Material	PDO	Identical	Identical
Sterilization	EtO	Identical	Identical
Packaging	Device wound onto inner support card, within a foil pouch within a poly/tyvek pouch	Identical	Similar

**7. Safety and Performance:**

The difference between the Quill™ Self-Retaining System (SRS) comprised of PDO and the above mentioned predicate devices does not raise any questions regarding the safety and effectiveness of the device. The device, as designed, is as safe and effective as its predicate devices.

**8. Conclusion**

Based on the design, material, performance specification and indications for use discussed herein, Angiotech believes the Quill™ Self-Retaining System (SRS) comprised of PDO is substantially equivalent to predicate devices currently marketed under the Federal Food, Drug and Cosmetic Act.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

AUG - 6 2007

Angiotech  
% Kevin Bentley, RAC  
Director of QA & RA  
100 Dennis Drive  
Reading, Pennsylvania 19606

Re: K071989

Trade/Device Name: Quill™ Self-Retaining System (SRS comprised of PDO)  
Regulation Number: 21 CFR 878.4840  
Regulation Name: Absorbable polydioxanone surgical suture  
Regulatory Class: II  
Product Code: NEW  
Dated: July 19, 2007  
Received: July 20, 2007

Dear Mr. Bentley:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

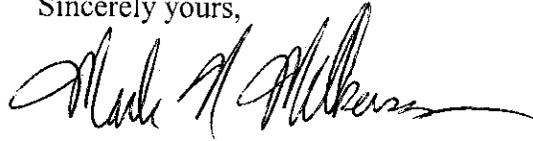
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 -- Kevin Bentley, RAC

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson", with a long horizontal flourish extending to the right.

Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

Section 4 - Indications for Use Statement

510k number if known: K071989

Device Name: Quill™ Self-Retaining System (SRS) comprised of PDO

Indications for Use:

Quill™ Self-Retaining System (SRS) comprised of PDO is indicated for soft tissue approximation where use of an absorbable suture is appropriate.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*Mark A. Williams*  
K071989

(Division Sign-Off)  
Division of General, Restorative,  
and Neurological Devices

510(k) Number K071989